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Western
Case No.: CE08435R

REMARKS

Reconsideration of the above-referenced application is respectively requested in view of these remarks. Claims 1-16 are currently pending.

REAL PARTY IN INTEREST

The present application is wholly assigned to Motorola, Inc., a Delaware corporation with its headquarters in Schaumburg, Illinois.

STATUS OF THE CLAIMS

Applicant originally filed claims of the present application on December 21, 2001. In the Office Action dated August 13, 2004, claims 1-16 were rejected under 35 U.S.C. § 102(e) as being anticipated by PCT Publication No. WO 01/45445 A1 to Moisio (Moisio). Applicant responded in a communication mailed November 15, 2004 by amending claims 1-16. In the office Action dated April 1, 2005, claims 1-16 were rejected under Section 102(e) as being anticipated by Moisio. This rejection was made final. Applicant's response to the April 1, 2005 Final Office Action is hereby submitted.

STATUS OF THE AMENDMENTS

Pursuant to Applicant's amendments made on November 15, 2004, claims 1-16 are currently pending. No amendments are made in this Response.

SUMMARY OF THE INVENTION

Applicant's invention relates to a method and apparatus for scheduling communications services in a wireless communication system. In particular, the communication network provides communication services to a plurality of mobile stations that operate within the network. Communication between the mobile station and the network is through a communication link. The mobile stations are placed into groups based upon a characteristic of an associated communication resource, e.g. path loss, and the communication services are scheduled for the group. Mobile states are grouped into groups where the mobile stations within each group have substantially alike communication resource characteristics. The communication resource may be then

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adjusted to transmit to the group based upon the characteristic of the group. According to the principles of the present invention, the communication services are scheduled collectively for the group of the mobile stations. In other words, communications services are provided to the group of the mobile stations having the same characteristic at the same time.

GROUND OF THE REJECTIONS TO BE REVIEWED

Claims 1-16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Moisisio.

ARGUMENTS

In the Final Office Action, claims 1-16 were rejected under 35 U.S.C. § 102(e) as being anticipated by Moisisio. In particular, the Final Office Action posits that Moisisio discloses that a characteristic of the communication link for each of the mobile stations within the communication network. It is further contended that a group of mobile stations is formed based upon the determined characteristics and that the communication services over the network are scheduled collectively for the group of mobile stations.

In the Amendment filed November 15, 2004 and focusing on independent claim 1 upon which claims 2-16 depend, Applicant stated that Moisisio did not disclose, teach or otherwise suggest that the communication services are provided over the network collectively for the group of mobile stations. By making this distinction, Applicant states that the communications services are being scheduled for the group as a group and so that communications can occur at the same time for the group. This is supported by the specification on Page 6, lines 12-33. In particular, Applicant illustrates in the specification that the algorithm collectively schedules for the mobile stations within the group when the scheduling is performed for the members of the group having similar path loss characteristics. For one of ordinary skill in the art, the principles of scheduling based on path loss characteristics extends to other characteristics, e.g. bit error rate. In addition, the specification demonstrates how the scheduling for more than one mobile station is carried out collectively when the use of uplink and downlink communications is discussed.

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Previously, Applicant pointed out that Moizio disclosed that a method for implementing dynamic channel allocation in a cellular radio network by grouping terminals, e.g. mobile stations, into a group according to at least one criterion, forming a priority list containing the highest quality channels available to a group, and allocating one or more channels from the terminal group's priority list individually to a terminal within the group when the terminal establishes a data transmission connection through the network. In the Final Office Action, it was agreed that Moizio discloses that one or more of the best channels on the priority list of the terminal group is allocated to the terminal. Therefore, it is agreed the Moizio discloses allocating the channels individually to a terminal. Accordingly, Moizio teaches that groups are formed according to a characteristic, but with respect to allocating the resources of the channels Moizio teaches that the terminals are provided those resources individually.

The Final Office Action suggests that Moizio also teach "collective" scheduling when it refers to communicating simultaneously to terminals as referenced on page 15, lines 3-8. Applicant respectfully submits that while the word "simultaneously" is used it does not disclose the collective scheduling of the present invention. In particular, a close examination of the discussion of Figure 5 in Moizio reveals that the scheduling is consistent with the interpretation of Moizio previously presented by Applicant and agreed to in the Final Office Action. In the discussion of Figure 5, Moizio says nothing and does not suggest that the group of terminals discussed is any different than the group of terminals that are described elsewhere by Moizio.

When Moizio discusses simultaneously it refers to the scheduling for uplink and downlink communications between the different mobiles, Moizio does not disclose, teach or otherwise suggest that the scheduling of the communication resources should be done collectively. Moizio only states the existence of communications in uplink and downlink directions. It does not disclose how the scheduling of the communication resources can be used in collectively allocating the uplink and downlink communications for mobile stations in a group have a determined characteristic as is claimed for the present invention.

Moizio also states that when a terminal is added to a group that it takes additional communications resources. By adding the additional terminal, communications are

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affected in both the uplink and downlink directions. Additional power needs in the uplink direction will adversely affect the power needs in the downlink direction. The solution provided by Moisisio examines the new terminal's effect at different base stations. Moisisio does not provide any guidance on how to address the effect of the additional terminal has to the group and to the scheduling of communications services to the group of mobile stations. Moreover, Moisisio does not address the interaction required in scheduling collectively for the uplink and downlink directions.

On the other hand, the present invention includes "scheduling communication services collectively for the group of mobile stations." As such, claim 1 does not schedule for a mobile station individually, which is admittedly discussed by Moisisio. By handling the scheduling collectively for the members of the group of mobile stations, the present invention provides for collective communication resources as described above. In view of the foregoing, it is respectfully submitted that Moisisio does not disclose teach or otherwise suggest each and every element of claim 1 and that claim 1 is not anticipated by the cited reference. As claims 2-16 depend upon and include all the limitations of claim 1, it is also respectfully submitted that Moisisio does not anticipate those claims. Applicant therefore respectfully requests that the rejection under Section 102(e) be withdrawn.

As the Applicant has overcome all substantive rejections and objections given by the Examiner and have complied with all requests properly presented by the Examiner, the Applicant contends that this Amendment, with the above discussion, overcomes the Examiner's objections to and rejections of the pending claims. Therefore, the Applicant respectfully solicits allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter.

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Please charge any fees associated herewith, including extension of time fees, to
50-2117.

Respectfully submitted,
Western, Gary E.

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